



**TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.**



# TARDEC Technology Integration

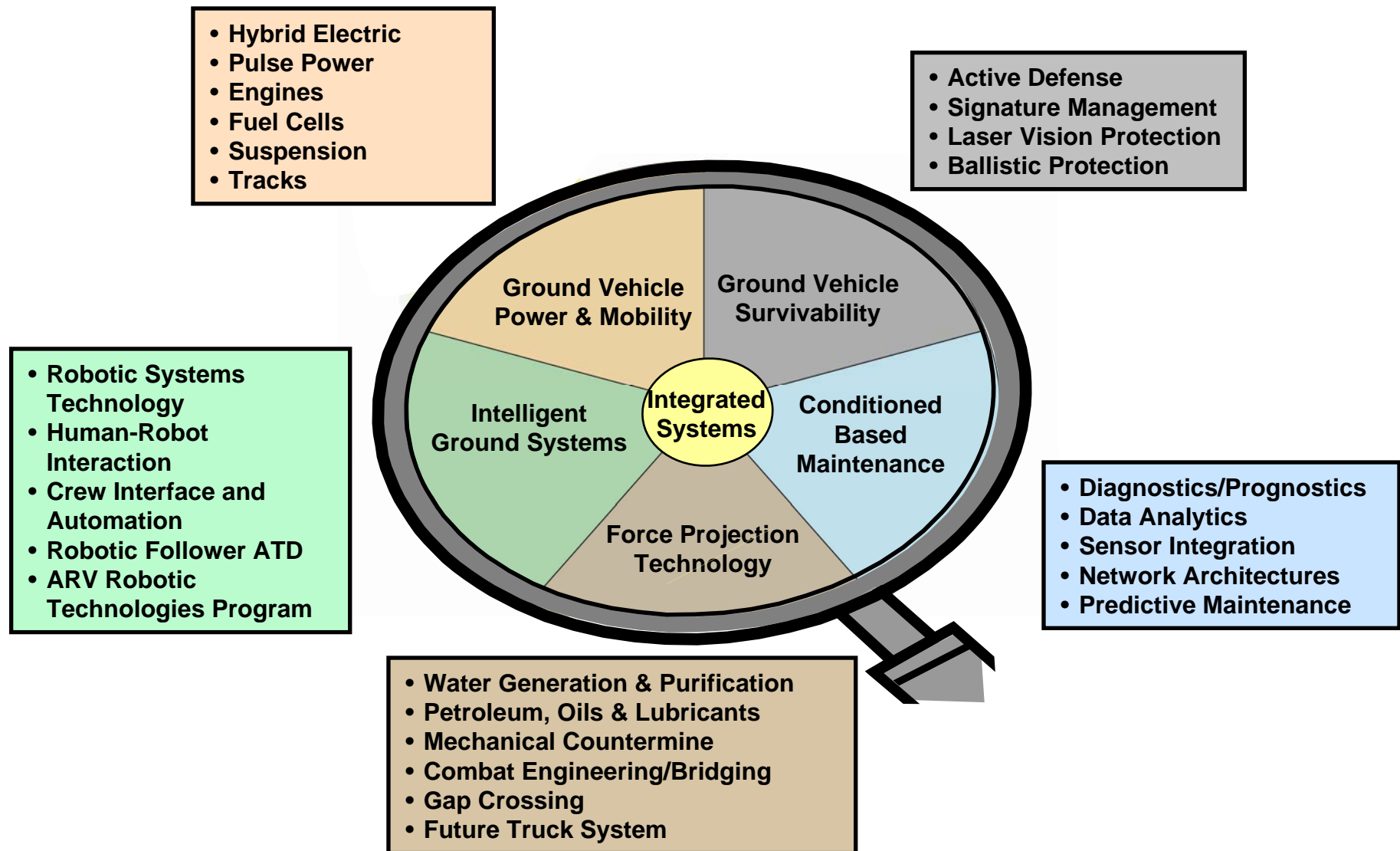
Dr. Paul Rogers

15 April 2008

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# TARDEC Technology Focus Areas



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## GROUND VEHICLE POWER & MOBILITY

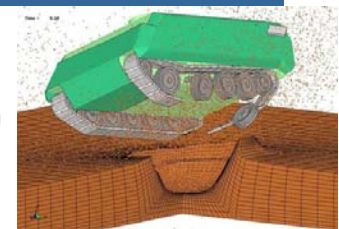
- Hybrid Electric
- Pulse Power
- Engines
- Fuel Cells
- Suspension
- Tracks



## LIGHTWEIGHT TRACK PROGRAM

## INTEGRATED SURVIVABILITY

- Active Defense
- Signature Management
- Laser Vision Protection
- Ballistic Protection



Predictive analysis of blast events – structures & crew

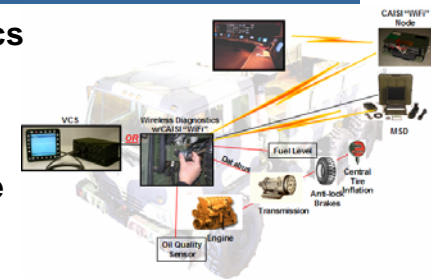
## INTELLIGENT GROUND SYSTEMS

- Robotic Systems Technology
- Human-Robot Interaction
- Crew Interface and Automation
- Robotic Follower ATD
- ARV Robotic Technologies Program

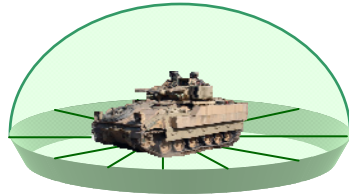


## CONDITION BASED MAINTENANCE

- Diagnostics/Prognostics
- Data Analytics
- Sensor Integration
- Network Architectures
- Predictive Maintenance



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## GROUND VEHICLE POWER & MOBILITY

- Hybrid Electric
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Battery Pack w/ Integrated Heat Exchanger

## INTEGRATED SURVIVABILITY

- Active Defense
- Signature Management
- Laser Vision Protection
- Ballistic Protection



Image Fusion Technology

## 360 DEGREE SITUATIONAL AWARENESS

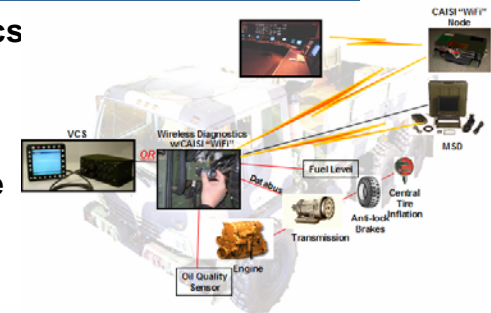
## INTELLIGENT GROUND SYSTEMS

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## CONDITION BASED MAINTENANCE

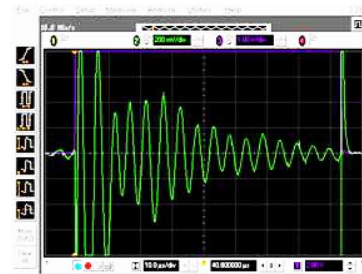
- Diagnostics/Prognostics
- Data Analytics
- Sensor Integration
- Network Architectures
- Predictive Maintenance



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# TARDEC Integrated Systems



## GROUND VEHICLE POWER & MOBILITY

- Hybrid Electric
- Pulse Power
- Engines
- Fuel Cells
- Suspension
- Tracks



Battery Pack w/ Integrated Heat Exchanger

## INTEGRATED SURVIVABILITY

- Active Defense
- Signature Management
- Laser Vision Protection
- Ballistic Protection



## SMART ARMOR & SMART STRUCTURES

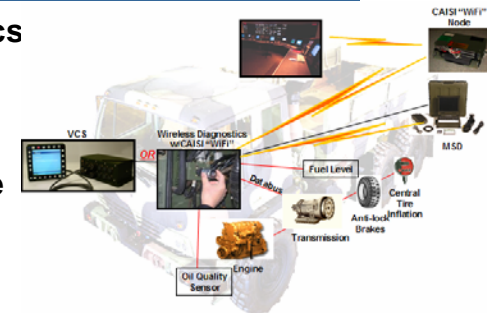
## INTELLIGENT GROUND SYSTEMS

- Robotic Systems Technology
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## CONDITION BASED MAINTENANCE

- Diagnostics/Prognostics
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- Predictive Maintenance



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